

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (withdrawn) A surgical device for cutting material and monitoring ECG comprising:
 - an elongate member having a distal region and a proximal region;
 - an energy delivery device associated with the elongate member at the distal region for delivering cutting energy to the material, said energy delivery device adapted for connection to an energy source; and
 - an ECG monitoring device associated with the distal region for monitoring ECG, said ECG monitoring mechanism adapted for connection to an ECG recording device.
2. (withdrawn) The device as claimed in claim 1 wherein the energy delivery device is configured to deliver at least one form of cutting energy selected from a group consisting of: electrical energy; microwave energy; ultrasound energy; and laser energy.
3. (withdrawn) The device as claimed in claim 1 wherein the energy delivery device is configured to deliver electrical energy comprising electrical current having a frequency within the radio frequency range.
4. (withdrawn) The device as claimed in claim 1 wherein the material comprises cellular tissue and wherein the energy delivery device is operable to deliver sufficient energy to the tissue to result in a rapid

increase in the intracellular temperature causing vaporization of intracellular water and subsequent cell lysis.

5. (withdrawn) The device as claimed in claim 1 wherein the ECG monitoring mechanism comprises at least one active electrode about the distal region adapted for connection to an ECG recording device.
6. (withdrawn) The device as claimed in claim 5 wherein the ECG monitoring mechanism operates in a unipolar mode.
7. (withdrawn) The device as claimed in claim 5 wherein the distal region comprises two or more electrodes about the distal region adapted for connection to an ECG recording device; and wherein the electrodes are configured in an arrangement where at least one of the electrodes is active and at least one is a reference electrode.
8. (withdrawn) The device as claimed in claim 7 wherein the at least one active electrode is located distally to the at least one reference electrode about the distal region.
9. (withdrawn) The device as claimed in claim 5 wherein the surgical device is insertable into a patient's vasculature using at least one of a guiding sheath and a dilator; and wherein at least one reference electrode is located on a distal region of at least one of the sheath and the dilator.
- 10.(withdrawn) The device as claimed in claim 7 wherein the ECG monitoring mechanism operates in a bipolar mode.
- 11.(withdrawn) The device as claimed in claim 1 wherein the energy delivery device comprises a functional tip with at least one active electrode.

12.(withdrawn) The device as claimed in claim 1 wherein the energy delivery device comprises a functional tip having two or more electrodes; and wherein the electrodes are configured in an arrangement where at least one of the electrodes is active and at least one is a return electrode.

13.(withdrawn) The device as claimed in claim 1 wherein the energy delivery device and the ECG monitoring device comprise one active electrode.

14.(withdrawn) The device as claimed in claim 1 wherein a pressure sensing mechanism is associated with the distal region for monitoring pressure about the distal region.

15.(withdrawn) The device as claimed in claim 1 wherein the pressure sensing mechanism comprises a pressure transmitting lumen extending between the proximal and distal regions, said lumen at the proximal region being adapted for fluid communication with a pressure transducer that provides a signal which varies as a function of pressure and adapted at the distal region for fluid communication with an environment about said distal region.

16.(currently amended) A method for creating a channel through a cardiac septal material located in a body of a patient, said body having a body vasculature, said method using a surgical device comprising a substantially elongated member, said elongated member defining a proximal region and a longitudinally opposed distal region, said surgical device also comprising an active electrode for delivering a radio-frequency electrical current into said cardiac septal material, said active electrode being operatively coupled to said elongated member substantially adjacent said distal region, said method further using a grounding pad attachable to said patient for providing a return path for said radio-frequency electrical current, said method comprising:

introducing said surgical device into said body of said patient;

attaching said grounding pad to said patient;

positioning said active electrode at a first desired location in said body of said patient, said first desired location being substantially adjacent said cardiac septal material;

obtaining data about an electrical parameter of said cardiac septal material using said active electrode so as to substantially assess the position of said surgical device; and

creating said channel through said cardiac septal material by delivering said radio-frequency electrical current from said active electrode to said grounding pad, said radio-frequency electrical current being delivered through said cardiac septal material;

wherein said active electrode has a diameter of 0.04 cm or less.

17.(previously presented) The method as claimed in claim 16, further comprising advancing said active electrode through said channel and out of said cardiac septal material to a second desired location.

18.(currently amended) The method as claimed in claim 17 further comprising obtaining data about an electrical parameter of said cardiac septal material so as to substantially assess the position of said surgical device after advancing said active electrode,

19.(previously presented) The method as claimed in claim 16 wherein introducing said surgical device comprises introducing said surgical device into said body vasculature.

20.(previously presented) The method as claimed in claim 19 wherein introducing said surgical device into said body of said patient comprises inserting said surgical device into a dilator and a guiding sheath positioned in said body vasculature.

21.(currently amended) The method as claimed in claim 20 comprising maintaining said surgical device substantially fixed relatively to said cardiac septal material and advancing said dilator and said sheath over said surgical device through said channel.

22.(currently amended) The method as claimed in claim 20 comprising advancing substantially jointly said dilator, said sheath and said surgical device ~~towards said second location through said channel~~.

23.(currently amended) ~~The method as claimed in claim 16 wherein said active electrode is used both for circulating said radio frequency electrical current and for obtaining said data about said electrical parameter of said cardiac septal material. The method as claimed in claim 16, comprising advancing said dilator, said sheath and said surgical device together through said channel.~~

24.(currently amended)~~The method as claimed in claim 18 wherein the ECG monitored at the second location is the ECG in the left atrium. The method as claimed in claim 16, wherein said active electrode has a diameter of about 0.04 cm.~~

25.(currently amended) The method as claimed in claim 16 wherein positioning said active electrode includes moving said active electrode device relatively to said cardiac septal material while monitoring said data about said electrical parameter of said cardiac septal material so as to substantially assess the position of said active electrode.

26.(previously presented) The method as claimed in claim 25 wherein the first desired location is determined in response to the observation of a distinctive change in said electrical parameter of said cardiac septal material.

27.(previously presented) The method as claimed in claim 26 wherein said electrical parameter of said cardiac septal material includes a voltage measured on said cardiac septal material, said first desired location being identified by a reduction in said voltage measured on said cardiac septal material.

28.(original) The method as claimed in claim 26 wherein the first desired location is a fossa ovalis of the heart.

29.(withdrawn) An electrosurgical device comprising:

an elongate member having a distal region and a proximal region, said distal region insertable within and along a lumen within a body of a patient and maneuverable therethrough to a desired location where the device is operated to cut material and monitor ECG at the desired location;

at least one electrode associated with the distal region for cutting tissue, said at least one electrode adapted for coupling to an electrical power source; and

an ECG monitoring mechanism associated with the distal region for monitoring ECG at the desired location within the body, said mechanism adapted for coupling to an ECG recording device.

30.(withdrawn) The device as claimed in claim 29 wherein the at least one electrode defines a functional tip comprising a conductive and radiopaque material at said distal region.

31.(withdrawn) The device as claimed in claim 30 wherein the electrical power source is capable of providing a high-frequency electrical power to said functional tip in a high impedance range.

32.(withdrawn) The device as claimed in claim 29 wherein the proximal region is adapted to releasably couple said electrode to said electrical power source.

33.(withdrawn) The device as claimed in claim 29 wherein the proximal region is adapted to releasably couple said electrode to said ECG recording device.

34.(withdrawn) A surgical device comprising:

means for cutting material at a desired location in a body of a patient; and

means for determining a position of the device responsive to ECG within the heart.

35.(withdrawn) The device as claimed in claim 34 comprising a flexible elongate member having a proximal region and a distal region, said distal region adapted for insertion within and along a lumen within the body and maneuverable therethrough to the desired location; and wherein said means for determining a position of the device is associated with the distal region to determine the position of the distal region.

36.-39. (cancelled)